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(71)Applicant: HINO MOTORS LTD

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(72)Inventor: TSUJI YUKIHIRO

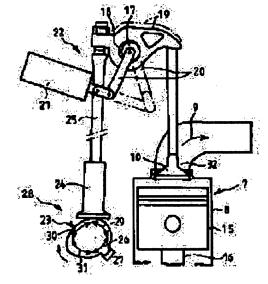
HARUFUJI SEIJI

(54) INTERNAL COMBUSTION ENGINE

(57)Abstract:

PROBLEM TO BE SOLVED: To recirculate an exhaust gas at a low cost by providing an exhaust gas recirculating valve opening mechanism for slightly opening an exhaust port to suck the exhaust gas into a cylinder when the exhaust pressure is higher than the intake pressure in intake process.

SOLUTION: When the exhaust valve cam 23 of an exhaust valve recirculation switching device 22 is rotated, a bush rod 25 is raised and lowered, a rocker arm 19 is reciprocated and tilted around the eccentric part 18 of a rocker shaft 17, and an exhaust valve 10 contact with the rocker arm 19 is raised and lowered to open and close an exhaust port 32. The exhaust valve opening and closing cam 23 has a slight exhaust gas



recirculating lift 27 provided in the part where the exhaust pressure in an intake are 28 is higher than the intake pressure, and the exhaust valve 10 is lowered in this part to slightly open the exhaust port 32. When the exhaust port 32 is slightly opened in the pressure reversed part where the exhaust pressure in an intake area 26 is higher than the intake pressure, an exhaust gas 9 is forcedly sucked into a cylinder 8 by a differential pressure since the exhaust pressure is higher than the intake pressure.

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